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ReviewArticle

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### A SYSTEMIC REVIEW OF ARTICLES ON PRATISHYAYA

(ALLERGIC RHINITIS)

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#### **ABSTRACT**

**Objective:** To review the articles published in Ayurveda on Allergic Rhinitis published between the years 2009 to 2018.

**Data Sources:** The electronic databases; Bibliographies oflocated articles; Online Journals in the field available at various search portals.

**Selection of Articles:** The articles that are available in different search portals published in between the year 2009 to 2018 have been selected for the analysis.

**Results:** Out of the 30 articles analyzed 2 were case studies, 16 were clinical trials, 11 were review article and one article on a pilot study. Allergic rhinitis is correlated to Vataja Pratishyaya in 23 articles. Out of the 16 clinical trials, 8 studies have been done on an average sample size of 20-40. In the available 16 articles on clinical trials ,8 trials have included Nasya as an intervention. 11 formulations of Nasya have been studied, in that9 were Navana Nasya. Kshavathu (Sneezing), Nasavarodha (Nasal Blockage), Nasa

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Srava (Rhinorrhea) were taken as the subjective parameter in all the 16 Clinical

studies. AEC is taken as objective parameter in 6 studies.

**CONCLUSIONS:** 

The publications reveal the available evidence-based information regarding utility,

efficacy, and safety of wide spectrum of ayurvedic formulations in the treatment of

Allergic Rhinitis. The review also illustrates common parameters used for the

assessment of clinical trial. Nasya has been selected as the intervention in majority of

the research studies in the reviewed articles. Thus, the review provides comprehension

regarding the need and scope of other treatment modalities like Snehapana, Swedana,

Dhoomapana, etc. as an intervention in clinical studies on Vataja Pratishyaya (Allergic

Rhinitis).

**KEY WORDS**: Vataja Pratishyaya, Allergic Rhinitis, Articles

**INTRODUCTION** 

Allergic rhinitis has become one of the most troublesome health issues in recent years

with a significant effect on quality of life, sleep, and work performance. The

metropolitans are affected much as they are exposed to air pollutants and climatic

changes. It represents a challenge to the public health in both industrialized and

developing countries because ofits chronic nature and economic impact.

The disease Vataja Pratishyaya explained in ayurvedictreatisesis analogous to Allergic

rhinitis as explained in modern medical science as most of the aspects likeaetio-

pathogenesis, clinical features and complications of allergic rhinitisare like that of

vataja pratishyaya.

Allergic rhinitis is one of the most common chronic disorders, with reported prevalence

ranging from 3% to 19% in various countries. Evidence suggests that seasonal allergic

rhinitis is found in approximately 10% of the general population and perennial allergic

rhinitis in 10% to 20%. 1 and the prevalence of the disorder is increasing.

In allied sciencethe treatment for allergic rhinitis aims mainly atsymptomatic relief and

it is found to be deficient due to high recurrence rateand adverse effects. Ayurveda-the

science of longevity suggests many effective treatments which can provide the

optimum cure and prevent further recurrence by enhancing the body immunity. During

the recent few decades, constant efforts have been made apply the wisdom of this science for the effective management especially in chronic respiratory disorders and it has come out with beneficial claims. Many articles have been published pertaining to the understanding and management of allergic rhinitis in Ayurveda.

The search and systemic review of such relevant articles accomplishes the better understanding of the evidence available. The detailed analysis of the recent studies and developments on the treatment of pratishyaya helps to understand the limitations and suggests the areas of research that are seldom explored. Thus, the present article is an attempt to consolidate and critically analyzethe article published on Pratisyaya (Allergic Rhinitis)between the year 2008 and 2019 available at various search portals<sup>2-31</sup>.

**Data Sources:** The electronic databases; Bibliographies oflocated articles; Online Journals in the field available at various search portals.

**Selection of Articles:** The articles that are available in different search portals published in between the year 2009 to 2018 have been selected for the analysis.

#### **OBSERVATION**

#### **OBSERVATION ON THE CORRELATION OF ALLERGIC RHINITIS**



Figure 1 Correlation Of Allergic Rhinitis

Allergic rhinitis is correlated to Vataja Pratishyaya in 23 articles out of the 30 articles. In 6 articles it is correlated to Pratishyaya and in one article it is considered as anurjatajanita pratishyaya.

#### **OBSERVATION ON TYPE OF ARTICLE**



Figure 2 TYPE OF ARTICLE

Out of the 30 articles analyzed 2 were case studies, 16 were clinical trials, 11 were review article and one article on a pilot study.

#### **OBSERVATION ON THE SAMPLE SIZE OF CLINICAL TRIALS**

SAMPLE SIZE	NUMBER OF STUDIES
≤20	3
≥21 <u>≤</u> 40	8
≥41 <u>&lt;</u> 60	2
≥60≤80	1
≥80≤100	1
≥100	1

**Table 1 Sample Size Of Different Studies** 

### Observational study on Shamanoushadhi 13% 12% Observational study on Shodhana Nasya) 12% 19% Observational study on the combined effect of Shodhana(Nasya) and Shamana Comparison between Shamana and Shodhana(Nasya) 19% Comparison between two different 25% drugs of Shodhana (Nasya)

#### **OBSERVATION ON INTERVENTIONS OF CLINICAL TRIAL**

Figure 3 Observation on interventions of clinical trial

Out of the 16 clinical trials 2 were having shamanoushadhi as an intervention, 2 were on shodhana (Nasya), 3 were having shodhana and shamana combined as an intervention, 4 studies have done on comparison between two different shamanoushadhies, 3 were on comparison between two different formulations of shodhana(Nasya) and 2 studies compared the efficacy of a shamaoushadhi with a standard allopathic medication.

#### LIST OF NASYA AUSHADHI AND SHAMANA AUSHADHI IN CLINICAL TRIALS

Sl No	NASYA AUSHADHI	SHAMANA AUSHADHI
1)	SHUNTYADI TAILA	CHITRAKA HAREETAKI
2)	TRIPHALADI TAILA	HARIDRA KHANDA
3)	ANUTAILA	SHUDHA HARIDRA
4)	KATPHALA CHOORNA	GUDA ARDRAKA

5)	SHADBINDU GHRITA	NIDIGDIKADI KWATHA
6)	SHIGRU TAILA	SHATYADI CHOORNA
7)	VIDANGADYA TAILA	
8)	PATADI TAILA	
9)	KUSHTADI TAILA	
10)	GOGHRITA	
11)	CHATURJATAKA	
	TAILA	

Table 2 List of NasyaAushadhi and ShamanaAushadhi in Clinical Trials

#### **OBSERVATION ON TYPE OF NASYA**

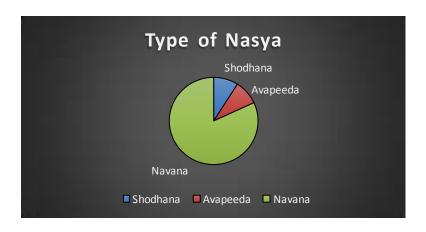
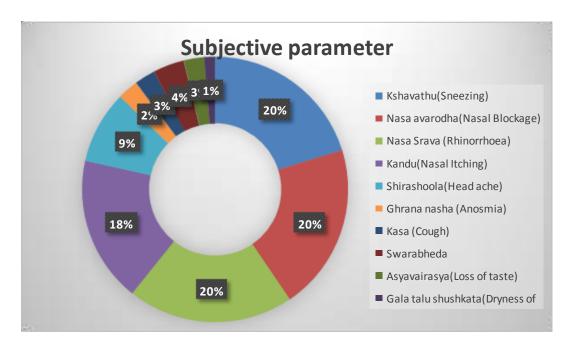


Figure 4 Type Of Nasya

Out of the 16 articles on clinical trials ,8 trials (including observational and comparative clinical studies) have included nasya as an intervention. 11 Nasyayogas have been studied,in that9 were navanaasya, 1 was avapeedanasya and 1 was shodhananasya.

#### **OBSERVATION ON THE PARAMETERS OF ASSESSMENT**



**Figure 5 Subjective Parameter** 

Kshavathu(Sneezing), Nasavarodha (Nasal Blockage), Nasa Srava(Rhinorrhoea) were taken as the subjective parameter in all the 16 studies. Kandu (Itching in nose) have been taken as a parameter in 14 studies, Shirashoola (Head ache) in 7 studies, Ghrananasha (Loss of smell) in 2 studies, Kasa in 2 studies, Asyavairasya in 2 studies and Gala taluShushkata in 1 study

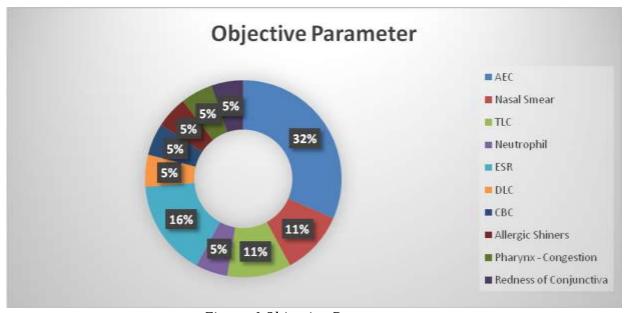


Figure 6 Objective Parameter

AEC is taken as objective parameter in 6 studies, nasal smear in 2 studies, TLC in 2 studies, neutrophil in one study, ESR IN 3 Studies, DLC in 1 study, CBC in 1 study,

Allergic shiners in 1 study, Pharynx Congestion in 1 study and redness of conjunctiva in 1 study.

#### **OBSERVATION ON THE RESULTS**

#### Results of Observational studies on ShamanaAushadhi

The two observational studies on Shamanaaushadhishows significant result on all the parameters.

#### Results of Observational studies on Shodhana(Nasya)

The analysis of the result of two studies conducted on the effect of shodhana karma in the form of Nasya shows statistically significant improvement on the chief complaints and totals nasal symptom score. Laboratory immunological parameters which included Total Leucocyte Count, Absolute Eosinophil Count, Neutrophils and Lymphocytes showed improvement with high statistical significance (< 0.001) in one study.

### Results of Observational studies on combined effect of ShamanaAushadhi and Shodhana (Nasya)

The three observational studies on the combined effect of Shamana and Shodhana(Nasya) shows significant result on all the parameters.

# Results of Comparative studies between ShamanaAushadhi and Shodhana (Nasya)

Analysis of the results of four studies that compared the efficacy of Shamana and ShodhanaAushadhi shows that both the interventions were statistically equally significant. Nasya is found to be giving better result in objective parameters, Sneezing, Nasal obstruction, Nasal discharge, and Turbinate Hypertrophy.

# Results of Comparative studies between two different formulations of Shodhana(Nasya)

SL.NO	INTERVENTION	RESULTS
1	<b>Group A-</b> ShuntyaditailaNasya – 7 days.	Group A> Group B
	<b>Group B-</b> Triphaladi taila Nasya – 7	

	days	
2	Group A-Shunthi tail Nasya for 14 days, followed by internal drug SudhaHaridra 2 gms TDS. for 21days  Group B-PradhamanaNasya with Katphalchurna till samayakashuddhilakshanaobtained, followed by internal drug ShuddhaHaridra 2 gms TDS for 21days	Marked improvement was found in 78.94% patients of group A, 91.30% of group B
3	Group A- ShigruTailaNasya Karma for 7 days. Dose: 6 Bindu Group B-VidangadyaTailafor 7 days. Dose: 6 Bindu	The percentage success rate of Group is A 57.5% & Group-B is 56.8%. There is no significant difference among the results of the treatment of Group-A and Group-B by paired proportion test of significance for i.e. p< 0.001.  Patients of group A treated with ShigruTailaNasya Karma have shown better results clinically compared to group B who were treated with VidangadyaTaila.

Figure 7 Results of Comparative studies between two different formulations of Shodhana (Nasya)

## Results of Comparative studies between ShamanaAushadhi / Shodhana and Standard allopathic Drug

The two studies that compared the effect of Ayurvedic treatment (one study on Shamanaaushadhi and the other on Nasya) with standard allopathic drug reveals that recurrence of the disease was less in group treated with ayurvedic treatment.

#### **RESULTS:**

Out of the 30 articles analyzed 2 were case studies, 16 were clinical trials, 11 were review article and one article on a pilot study. Allergic rhinitis is correlated to Vataja Pratishyaya in 23 articles. Out of the 16 clinical trials, 8 studies have been done on an average sample size of 20-40. In the available 16 articles on clinical trials ,8 trials have included Nasya as an intervention. 11 formulations of Nasya have been studied, in that9 were Navana Nasya. Kshavathu(Sneezing), Nasavarodha (Nasal Blockage), Nasa Srava (Rhinorrhoea) were taken as the subjective parameter in all the 16 Clinical studies.AEC is taken as objective parameter in 6 studies.

#### **CONCLUSION:**

The review of ayurvedic articles related to Vataja Pratishyaya (Allergic Rhinitis) aids to the fundamental understanding, interpretation, and analysis of classical literature Ayurveda. The review of also provides a comprehensive insight to the common causative factors, pathophysiology, clinical manifestations, and the management of allergic Rhinitis.

The publications reveal the available evidence-based information regarding utility, efficacy, and safety of wide spectrum of ayurvedic formulations in the treatment of Allergic Rhinitis. The review also illustrates common parameters used for the assessment of clinical trial. It also highlights the need of conducting clinical trials with large sample size. Nasya has been selected as the intervention in majority of the research studies in the reviewed articles. Thus, the review provides comprehension regarding the need and scope of other treatment modalities like Snehapana, Swedana, Dhoomapana, e.t.cas an intervention inclinical studies on Vataja Pratishyaya (Allergic Rhinitis).

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